

## EAST Search History

| Ref # | Hits | Search Query  | DBs                                | Default Operator | Plurals | Time Stamp       |
|-------|------|---|------------------------------------|------------------|---------|------------------|
| L1    | 24   | (demodulat\$4) and ((de-map\$4 or demap\$4) near3 (memory or buffer))   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR               | ON      | 2006/12/09 13:35 |
| L2    | 158  | (demodulat\$4) same ((de-interleave\$4 or deinterleav\$4) near3 (memory or buffer))   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR               | ON      | 2006/12/09 13:36 |
| L3    | 3    | L2 and (deinterleav\$4 or de-interleav\$4) same (systematic same parity)  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR               | ON      | 2006/12/09 15:26 |
| L4    | 3    | L2 and ((deinterleav\$4 or de-interleav\$4) same (systematic same parity))  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR               | ON      | 2006/12/09 13:39 |
| L5    | 3    | L2 and ((deinterleav\$4 or de-interleav\$4) same (systematic same parity)) and decod\$4   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR               | ON      | 2006/12/09 13:40 |
| L6    | 134  | ((deinterleav\$4 or de-interleav\$4 or de-map\$4 or demap\$4 or de-shuffl\$4 or deshuffl\$4) same (systematic same parity))   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR               | ON      | 2006/12/09 13:41 |
| L7    | 42   | ((deinterleav\$4 or de-interleav\$4 or de-map\$4 or demap\$4 or de-shuffl\$4 or deshuffl\$4) same (systematic same parity)) same (stor\$4 or memory or buffer)                  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR               | ON      | 2006/12/09 14:00 |
| L8    | 21   | ((deinterleav\$4 or de-interleav\$4 or de-map\$4 or demap\$4 or de-shuffl\$4 or deshuffl\$4) same (systematic same parity)) same (stor\$4 or memory or buffer) and demodulat\$4 | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR               | ON      | 2006/12/09 14:09 |
| L9    | 27   | ((deinterleav\$4 or de-interleav\$4 or de-map\$4 or demap\$4 or de-shuffl\$4 or deshuffl\$4) same (systematic same parity)) same demodulat\$4                                   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR               | ON      | 2006/12/09 14:12 |
| L10   | 68   | ((deinterleav\$4 or de-interleav\$4 or de-map\$4 or demap\$4 or de-shuffl\$4 or deshuffl\$4) same (systematic same parity)) and demodulat\$4                                    | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR               | ON      | 2006/12/09 14:14 |

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|     |    |   |                                    |    |     |                  |
|-----|----|---|------------------------------------|----|-----|------------------|
| L11 | 13 | ((deinterleav\$4 or de-interleav\$4 or de-map\$4 or demap\$4 or de-shuffl\$4 or deshuffl\$4) same (systematic same parity)) and (demodulat\$4 near2 (scheme or mode)) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/12/09 14:53 |
| L12 | 37 | ((deinterleav\$4 or de-interleav\$4) near3 (buffer or memory)) and (systematic and parity).and demodulat\$4   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/12/09 14:55 |
| L13 | 64 | ((deinterleav\$4 or de-interleav\$4) near3 (buffer or memory or stor\$4)) and (systematic and parity) and demodulat\$4  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/12/09 14:55 |
| L14 | 74 | ((deinterleav\$4 or de-interleav\$4) near4 (buffer or memory or stor\$4)) and (systematic and parity) and demodulat\$4  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/12/09 15:04 |
| L15 | 57 | ((deinterleav\$4 or de-interleav\$4) near4 (buffer or memory or stor\$4)) and (systematic and parity) and demodulat\$4 and (cod\$4 adj1 rate)                         | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/12/09 15:38 |
| L16 | 1  | ((de-map\$4 or demap\$4) near4 (buffer or memory or stor\$4)) and (systematic and parity) and demodulat\$4 and (cod\$4 adj1 rate)                                     | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/12/09 15:15 |
| L17 | 0  | (2003/0126550).CCLS.  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/12/09 15:16 |
| L18 | 0  | L17 and demodulat\$4  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/12/09 15:16 |
| L19 | 0  | (2003/0126550).CCLS.  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/12/09 15:16 |
| L20 | 2  | ("20030126550").PN.   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/12/09 15:16 |
| L21 | 0  | L20 and demodulat\$4  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/12/09 15:17 |

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|     |      |  |                                    |    |    |                  |
|-----|------|--|------------------------------------|----|----|------------------|
| L22 | 175  | ((deinterleav\$4 or de-interleav\$4) near4 (buffer or memory or stor\$4)) and demodulat\$4 and (cod\$4 adj1 rate)    | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/12/09 15:17 |
| L23 | 63   | (((deinterleav\$4 or de-interleav\$4) near4 (buffer or memory or stor\$4)) same demodulat\$4) and (cod\$4 adj1 rate) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/12/09 15:18 |
| L24 | 55   | L23 not L15  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/12/09 15:26 |
| L25 | 55   | L24 and (de-interleav\$4 or deinterleav\$4)  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/12/09 15:33 |
| L27 | 22   | (multilevel or multi-level) near2 ("QPSK" or "BPSK")   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/12/09 15:37 |
| L28 | 22   | L27 and (multilevel or multi-level)  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/12/09 15:37 |
| L29 | 2813 | (demodulat\$4 near2 order)   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/12/09 15:38 |
| L30 | 75   | (demodulat\$4 near2 order) with "3"  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/12/09 15:39 |
| L31 | 5    | (demodulation adj1 order) with "3"   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/12/09 15:39 |
| L32 | 21   | (demodulation near2 order) with "3"  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/12/09 15:40 |
| L33 | 0    | (high adj1 demodulation adj1 order) with "3"   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/12/09 15:40 |
| L34 | 0    | (high adj1 demodulation adj1 order)  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/12/09 15:41 |

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|     |      |   |                                    |    |     |                  |
|-----|------|---|------------------------------------|----|-----|------------------|
| L36 | 12   | (high near3 demodulation adj1 order)  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/12/09 15:42 |
| L37 | 102  | (demodulation adj1 order)   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/12/09 15:42 |
| L38 | 3    | (demodulation adj1 order) same ("QPSK" or "BPSK")   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/12/09 15:43 |
| L39 | 102  | (demodulation adj1 order)   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/12/09 15:43 |
| L40 | 2    | "20040062318"   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/12/09 16:45 |
| L41 | 6    | (address near3 (demodulat\$4 near2 (type or scheme or mode)))   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/12/09 16:46 |
| S1  | 8    | (Yu.in. or Ha.in. or Kim.in.) and (demodulat\$4 and deshuffl\$4)  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/10/27 10:50 |
| S2  | 8    | (Yu.in. or Ha.in. or Kim.in.) and (demodulat\$4 and deshuffl\$4)  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/12/09 16:13 |
| S3  | 4    | ("4523323" "5233479").PN.   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/10/27 11:00 |
| S4  | 2983 | 375/324.ccls. or 341/81.ccls. or 714/6.ccls.  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/10/27 11:04 |
| S5  | 0    | S4 and ((multilevel or multi-level) same demodulat\$4) and (deinterleav\$4 same map\$4 same reliability) and (systematic same parity) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON  | 2006/10/27 11:06 |

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|     |      |  |                                    |    |    |                  |
|-----|------|--|------------------------------------|----|----|------------------|
| S6  | 0    | S4 and ((multilevel or multi-level) same demodulat\$4) and deinterleav\$4 and (map\$4 same reliability) and (systematic same parity) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:06 |
| S7  | 5    | (multilevel or multi-level) and deinterleav\$4 and (map\$4 same reliability) and (systematic same parity)                            | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:07 |
| S8  | 7    | (multilevel or multi-level) and (map\$4 same reliability) and (systematic same parity)   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:11 |
| S9  | 1    | (multilevel or multi-level) and (map\$4 same reliability) and (parity) and ((demap\$4 or de-map\$4) same (stor\$4 or memory))        | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:12 |
| S10 | 1    | (multilevel or multi-level) and (map\$4 same reliability) and (parity) and ((demap\$4 or de-map\$4) and (stor\$4 or memory))         | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:12 |
| S11 | 57   | (multilevel or multi-level) and (map\$4 same reliability) and (parity) and (stor\$4 or memory)                                       | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:13 |
| S12 | 45   | S11 and ((stor\$4 or memory) same address)   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:17 |
| S13 | 3    | S11 and ((stor\$4 or memory) same address same (modulat\$4 or demodulat\$4))   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:15 |
| S14 | 1049 | ((demap\$4 or de-map) same (demodulat\$4))   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:18 |
| S15 | 451  | ((demap\$4 or de-map) same (demodulat\$4) same (stor\$4 or memory))  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:18 |
| S16 | 10   | S15 and (multi-level or multilevel)  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:20 |

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|     |     |   |                                    |    |    |                  |
|-----|-----|---|------------------------------------|----|----|------------------|
| S17 | 7   | (multi-level or multilevel) and ((multiple or plurality) adj3 (demodulat\$4)) and (map\$4 same interleav\$4)                | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:22 |
| S18 | 70  | (multi-level or multilevel) and ((multiple or plurality) adj3 (demodulat\$4)) and (map\$4)                                  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:22 |
| S19 | 21  | (multi-level or multilevel) and ((multiple or plurality) adj3 (demodulat\$4)) and (map\$4) and parity                       | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:26 |
| S20 | 29  | (multi-level or multilevel) and ((multiple or plurality) adj3 (modulat\$4)) and (map\$4) and parity and interleav\$4        | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:29 |
| S21 | 16  | S20 not S19   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:26 |
| S22 | 54  | (multi-level or multilevel) and ((different\$4) adj3 (modulat\$4 or demodulat\$4)) and (map\$4) and parity and interleav\$4 | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 11:29 |
| S23 | 986 | (stor\$4 near4 parity adj1 (bits or symbols))   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 18:38 |
| S24 | 1   | (stor\$4 near4 parity adj1 (bits or symbols)) and ((de-map\$4 or demap\$4) near3 demodulat\$4)                              | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 18:38 |
| S25 | 1   | (stor\$4 near4 parity adj1 (bits or symbols)) and ((de-map\$4 or demap\$4) near5 demodulat\$4)                              | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 18:40 |
| S26 | 5   | ((de-map\$5 or demap\$5) same (different near3 demodulat\$4))   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 18:49 |
| S27 | 0   | ((de-shuffl\$4\$5 or deshuffl\$4\$5) same (different near3 demodulat\$4))   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 18:50 |
| S28 | 86  | (systematic same reliability same parity)   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 18:54 |

## EAST Search History

|     |      |   |                                    |    |    |                  |
|-----|------|---|------------------------------------|----|----|------------------|
| S29 | 0    | S28 and ((different or plurality or multiple) near3 demdoulat\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 18:53 |
| S30 | 2    | S28 and ((different or plurality or multiple) near3 demodulat\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 18:54 |
| S31 | 258  | (map\$4 with (parity adj1 bits))                                  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 18:55 |
| S32 | 8    | S31 and ((different or plurality or multiple) near3 demodulat\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 18:55 |
| S33 | 2670 | (map\$4 same parity)  | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 18:55 |
| S34 | 58   | S33 and ((different or plurality or multiple) near4 demodulat\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 18:56 |
| S35 | 52   | S34 and (store or memory)   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/10/27 18:56 |
| S36 | 14   | (demodulat\$4) and ((de-map\$4 or demap\$4) near3 (memory))       | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/12/09 13:13 |
| S37 | 37   | (demodulat\$4) and ((de-shuffl\$4 or deshuffl\$4) near3 (memory)) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/12/08 15:55 |
| S38 | 37   | S37 not S36   | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/12/08 15:55 |